



## Volunteer Army Ammunition Plant

### Proposed plan for soil and sediment cleanup at the TNT Manufacturing Valley and Redwater Treatment Plant sites

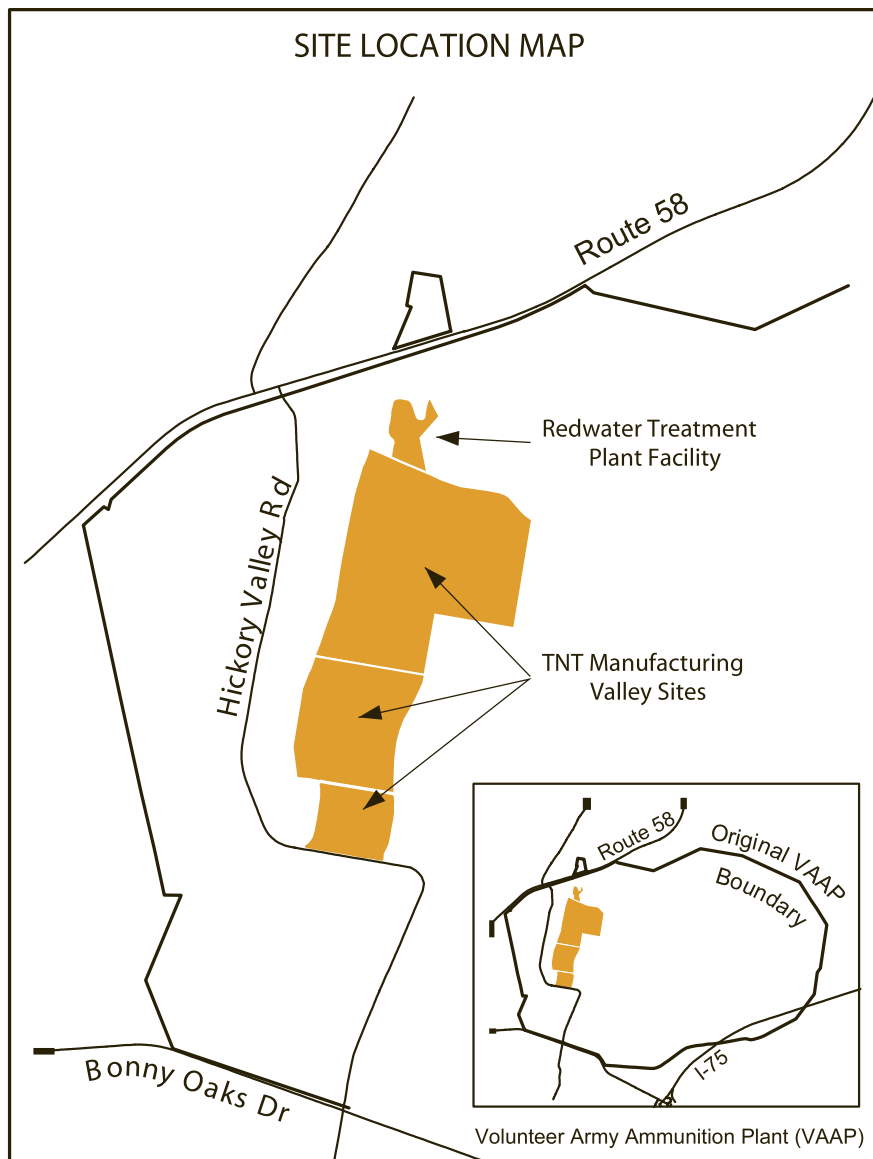
July 2005

#### About this document

This document summarizes the Army's proposal for cleaning up soil and sediment at the TNT Manufacturing Valley and Redwater Treatment Plant sites. The Army requests public comment on the proposed alternative outlined in this fact sheet. In cooperation with the U.S. Environmental Protection Agency (EPA) and the State of Tennessee Department of Environment and Conservation (TDEC), the Army developed this plan and will implement the remedy for these two sites after considering and addressing comments from the public.

This environmental update highlights key information from the Statement of Basis, which is a brief document that summarizes all the previous investigations conducted at the site, and presents the various alternatives considered for cleanup. The Statement of Basis and other key studies that have been performed for the TNT Manufacturing Valley and Redwater Treatment Plant are maintained in the information repository at the Chattanooga-Hamilton County Bicentennial Library located at 100 Broad Street in Chattanooga, Tenn.

The Statement of Basis and cleanup address soil and sediment. Groundwater at the site is being addressed through a site-wide groundwater corrective measures study. Only one surface-water body is present, located at the Redwater Treatment Plant. Because no contamination was detected, no action is proposed for surface water.



#### Facility and site description

Volunteer Army Ammunition Plant formerly occupied approximately 6,100 acres in Chattanooga, located in Hamilton County. Volunteer was once used for the production and storage of 2,4,6-trinitrotoluene (TNT).

The Army placed the facility on standby in 1977 and declared it excess in 1999.

The TNT Manufacturing Valley initially consisted of 16 production lines that were situated on approximately 330 acres. Six of these lines were replaced in 1969 by the New TNT Area located on 80 acres in the



southern portion of the TNT Manufacturing Valley.

### Why is cleanup needed?

The Redwater Treatment Plant is located on 9.4 acres at the northern end of the TNT Manufacturing Valley. All redwater waste generated from the production of TNT was sent to the Redwater Treatment Plant by aboveground flumes.

The Army studied the TNT Manufacturing Valley and Redwater Treatment Plant sites and drew the following conclusions:

- Explosives, arsenic, lead, polychlorinated biphenyls, and polynuclear aromatic hydrocarbons are present at concentrations above the soil and sediment cleanup criteria established for the TNT Manufacturing Valley and Redwater Treatment Plant.
- Removing affected soil and sediment will reduce risks of exposure to regulatory acceptable levels for future commercial and industrial tenants and animals that are on site.

### TNT Manufacturing Valley and Redwater Treatment Plant cleanup alternatives evaluated

The Army considered the following alternatives for cleaning up impacted soil and sediment at the TNT Manufacturing Valley and Redwater Treatment Plant. Information on the alternatives and the Army's evaluation can be found in the Statement of Basis and the documents it summarizes.

- **Alternative 1:** Onsite ex-situ stabilization and offsite disposal and land use controls
- **Alternative 2:** In-situ and ex-situ enhanced bioremediation using DARAMEND® with disposal on site, onsite ex-situ stabilization with offsite disposal and land-use controls

- **Alternative 3:** Onsite ex-situ enhanced windrow composting and onsite disposal, onsite ex-situ stabilization and offsite disposal and land-use controls

### Preferred cleanup alternative

Alternative 1 is the Army's preferred cleanup option for the TNT Manufacturing Valley and Redwater Treatment Plant sites. The soil will be excavated and soil containing hazardous levels of lead, arsenic, and explosives is then stabilized on-site to make it non-hazardous, and then is disposed of off-site. This option complies with the regulatory requirements and was approved by the EPA and TDEC. Formal approval will come from both agencies after the comment period ends on August 16, 2005.

### What do you think?

The Army requests public comment on this proposed cleanup alternative between July 18 and August 16, 2005. The Army wants to consider your comments before implementing the cleanup plan.

Mail written comments or questions postmarked no later than August 16, 2005 or call:

Mr. Scott Bolton  
Commander's Representative  
Volunteer Army Ammunition Plant  
P.O. Box 22607  
Chattanooga, Tennessee 37422.  
Phone: (423) 893-9143.

### Next steps

The Army will consider and address all significant public comments received during the comment period. The responses to significant comments will be included in the Responsiveness Summary, which will become part of the Statement of Basis and also will be available at the information repository located at the Chattanooga-Hamilton County Bicentennial Library, 100 Broad Street, Chattanooga, Tennessee 37402.